Model Number

NJ6-22-N

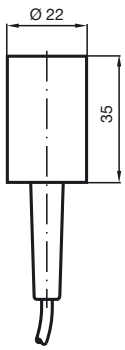
Features

- **6 mm flush**
- **Usable up to SIL 2 acc. to IEC 61508**

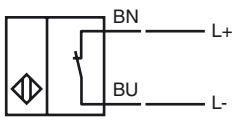
Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	6 mm
Installation		flush
Assured operating distance	s_a	0 ... 4.86 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.85
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8.2 V (R_i approx. 1 kΩ)
Switching frequency	f	0 ... 2000 Hz
Hysteresis	H	1 ... 7 typ. 4 %
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
Functional safety related parameters		
$MTTF_d$		4566 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications		
Connection type		cable PVC , 2 m
Core cross-section		0.75 mm²
Housing material		PBT
Sensing face		PBT
Degree of protection		IP68
Cable		
Bending radius		> 10 x cable diameter
General information		
Use in the hazardous area		see instruction manuals
Category		2G; 3G
Compliance with standards and directives		
Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
FM approval		
Control drawing		116-0165
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V

Dimensions



Electrical Connection



Release date: 2017-05-30 13:12 Date of issue: 2017-07-24 106456_eng.xml

Equipment protection level Gb		
CE marking		CE 0102
Effective internal inductivity	C_i	≤ 130 nF ; a cable length of 10 m is considered.
Effective internal inductance	L_i	≤ 100 µH ; a cable length of 10 m is considered.
Maximum permissible ambient temperature	T_{amb}	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate.
Equipment protection level Gc (ic)		
CE marking		CE
Effective internal inductivity	C_i	≤ 130 nF ; a cable length of 10 m is considered.
Effective internal inductance	L_i	≤ 100 µH ; A cable length of 10 m is considered.
Special conditions		
for Pi=34 mW, Ii=25 mA, T6		70 °C (158 °F)
for Pi=34 mW, Ii=25 mA, T5		85 °C (185 °F)
for Pi=34 mW, Ii=25 mA, T4-T1		100 °C (212 °F)
for Pi=64 mW, Ii=25 mA, T6		69 °C (156.2 °F)
for Pi=64 mW, Ii=25 mA, T5		84 °C (183.2 °F)
for Pi=64 mW, Ii=25 mA, T4-T1		100 °C (212 °F)
for Pi=169 mW, Ii=52 mA, T6		51 °C (123.8 °F)
for Pi=169 mW, Ii=52 mA, T5		66 °C (150.8 °F)
for Pi=169 mW, Ii=52 mA, T4-T1		80 °C (176 °F)
for Pi=242 mW, Ii=76 mA, T6		39 °C (102.2 °F)
for Pi=242 mW, Ii=76 mA, T5		54 °C (129.2 °F)
for Pi=242 mW, Ii=76 mA, T4-T1		61 °C (141.8 °F)
Equipment protection level Da		
CE marking		CE 0102
Effective internal inductivity	C_i	≤ 130 µF A cable length of 10 m is considered.
Effective internal inductance	L_i	≤ 100 µH A cable length of 10 m is considered.

Release date: 2017-05-30 13:12 Date of issue: 2017-07-24 106456_eng.xml